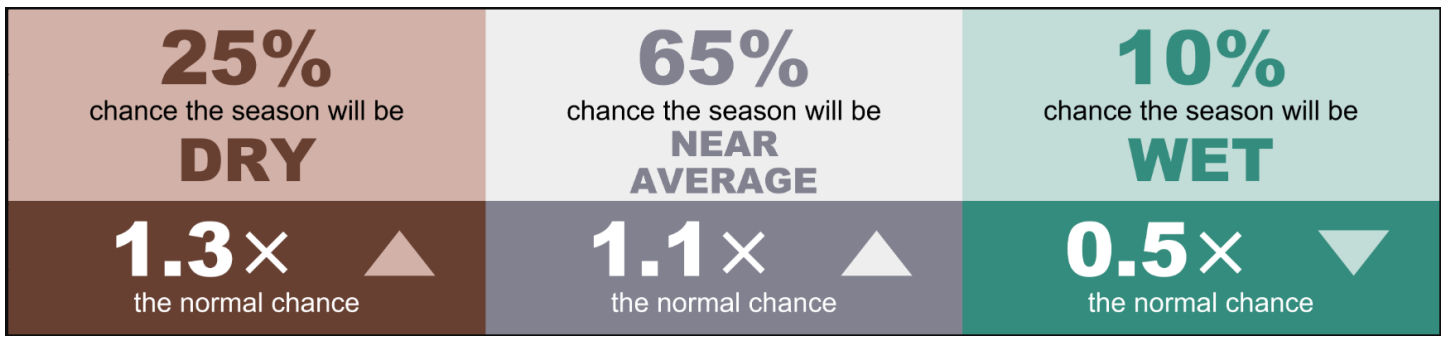
3-month summary

- The likelihood of a colder three month period overall is slightly greater than normal
- There is a reduced chance of wet conditions and impacts from heavy rainfall
- Chances of dry conditions are greater than normal
- Stormy conditions, and impacts from high winds, are less likely than normal

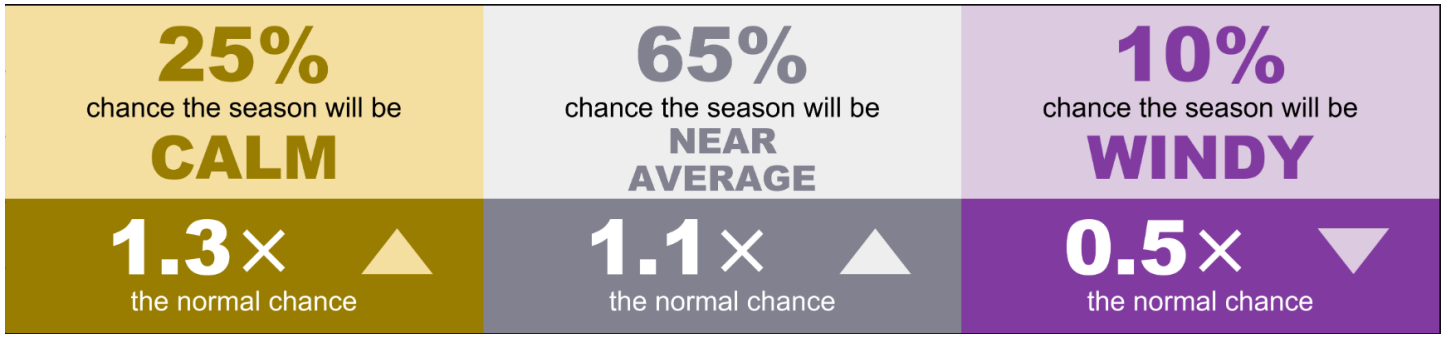
3-month likelihood of impact

Temperature

Precipitation



Wind speed

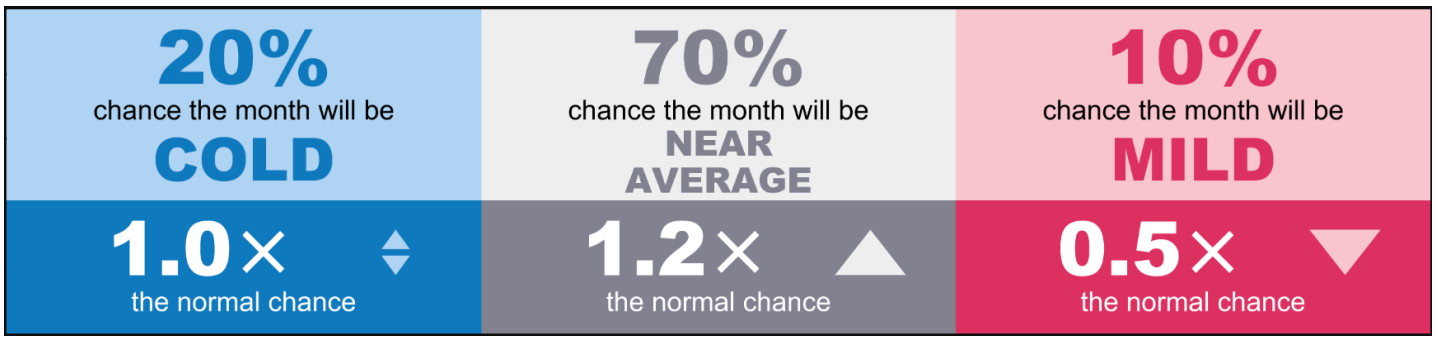


1-month summary

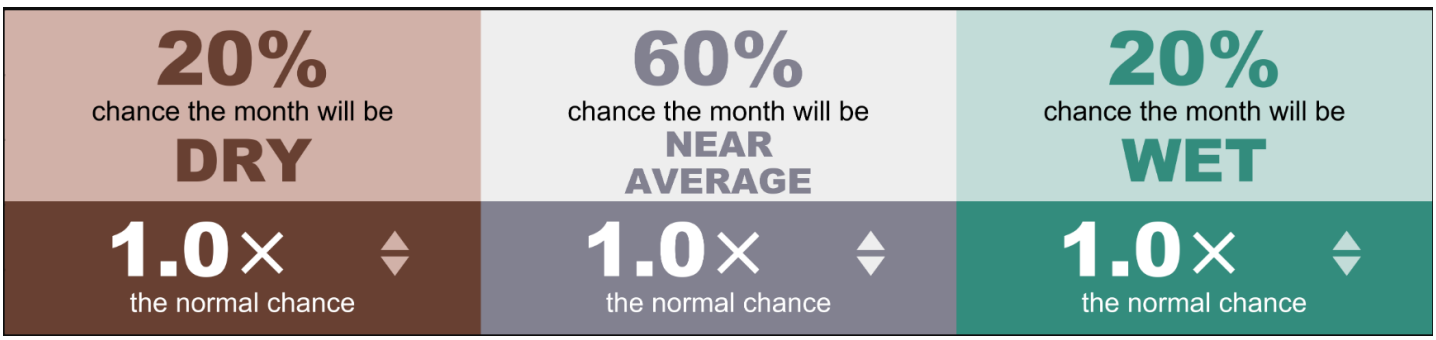
- The likelihood of both wet and dry conditions in November are close to normal
- The chances of a cold November are around normal
- The risk of impacts from cold weather is nonetheless greater than in the most recent years

1-month likelihood of impact

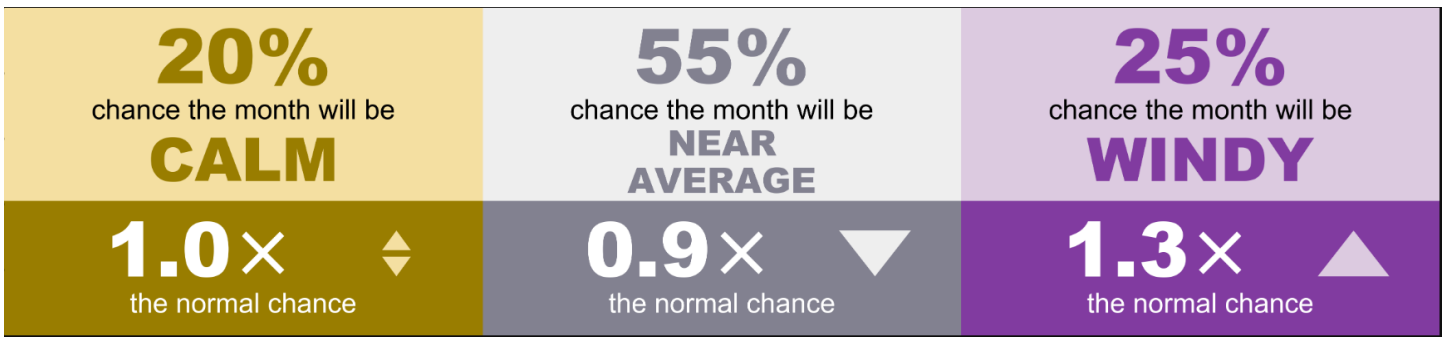
Temperature



Precipitation



Wind speed



Understanding the Outlook

The Outlook uses 3 categories for possible UK temperature, precipitation and wind speed in the next 1 and 3 months:

COLD, NEAR AVERAGE and MILD for temperature
WET, NEAR AVERAGE and DRY for precipitation
CALM, NEAR AVERAGE and WINDY for wind speed

These are linked to observed UK conditions in past years. The NEAR AVERAGE category represents typical conditions for the period and has a normal likelihood of 60%. The higher and lower categories represent more unusual conditions that are more likely to produce impacts. Each has a normal likelihood of 20%.

The Outlook shows how the chances of occurrence of the categories differ from normal, based on knowledge of expected global meteorological patterns. It does not identify which category will actually occur.

Same 3-month period over the last 10 years

2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	MILD	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE
NEAR AVERAGE	WET	NEAR AVERAGE	WET	DRY	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	DRY
NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	WINDY	CALM	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	CALM	NEAR AVERAGE

Same 1-month period over the last 10 years

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	MILD	COLD	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE
NEAR AVERAGE	DRY	NEAR AVERAGE	WET	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	DRY
NEAR AVERAGE	NEAR AVERAGE	CALM	WINDY	CALM	NEAR AVERAGE	NEAR AVERAGE	CALM	NEAR AVERAGE	NEAR AVERAGE

Outlook in context

Drivers of UK weather for November to January

The impact of global weather patterns acts to shift the chances of the categories in the Outlook. Their influence on the UK increases through late autumn and into winter.

Drivers relevant to the current Outlook are:

- La Niña, which can bring higher pressure regimes to the north and west of Europe during late autumn and early winter
- An ongoing negative Indian Ocean Dipole which could potentially reinforce the influence of La Niña

Long-range weather predictions
The Met Office and other prediction centres around the world routinely produce long-range predictions of conditions in the months ahead.
There is relatively good agreement for an increased likelihood of higher-than-average pressure to the west of the UK initially. However, there is greater variation in the extent that high pressure extends across the UK. For the rest of the season, there is good general agreement with respect to increased chances of high pressure centred closer to the UK which would see greater likelihood of a reduction in the frequency of rain-bearing systems, an increase in cold, and a reduction in storminess, as compared to normal.

Impact
For the whole country, the likelihood of impacts from strong winds is decreased as compared to typical risks for the season. However, this doesn't preclude the chance of stormy spells at times. With chances of a cold season being greater than a mild one, impacts from wintry weather are more likely than seen in recent years. With dry conditions more likely than wet, there is a reduction in the risk of impacts from heavy rain.

Outlook compared to normal likelihood

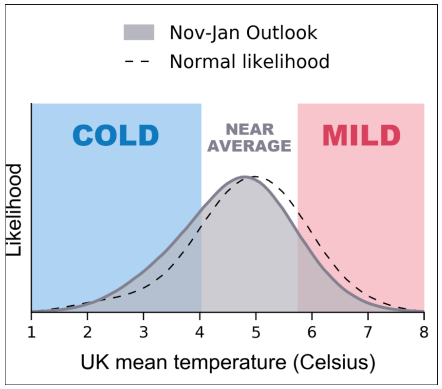
The curves below show the likelihood of the 1- and 3-month average temperature, precipitation and wind speed taking specific values. In each case:

- The dashed curve shows the normal likelihood based on how often each value has been recorded in past years
- The solid curve shows the current likelihood based on the Outlook for this year

The differences in these curves show how the probabilities for the coming periods differ compared to past years. Where the solid curve (corresponding to this year's Outlook) lies above the dashed curve (normal likelihood), the temperature, precipitation or wind speed at that point has a greater-than-normal likelihood of occurring. Likewise, wherever it is below the dashed curve, the likelihood of those values is less than normal.

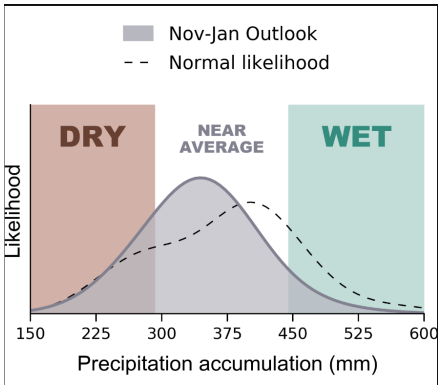
A shift of the solid curve to the left of the dashed curve indicates an increase in the chances of below-average temperature, rainfall or winds. A shift to the right, meanwhile, indicates increased chances of above-average values.

3-month temperature Outlook compared to normal



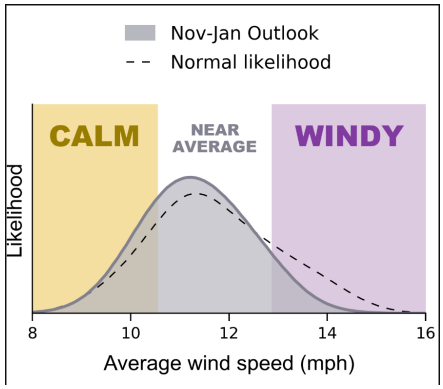
Shift toward a colder than normal period

3-month precipitation Outlook compared to normal



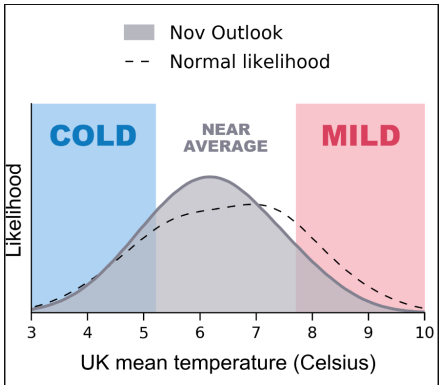
Shift toward drier conditions

3-month wind speed Outlook compared to normal



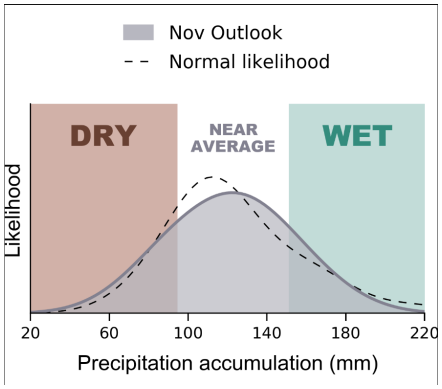
Likely calmer than normal for the period as a whole

1-month temperature Outlook compared to normal



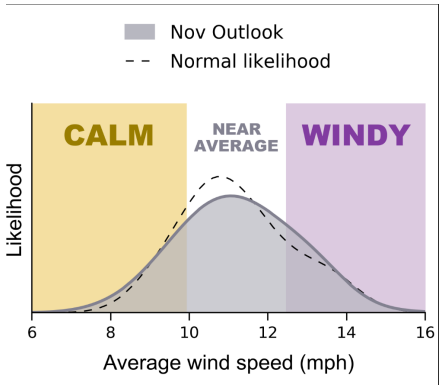
Chances of cold are normal

1-month precipitation Outlook compared to normal



Equal chances of a dry or wet month

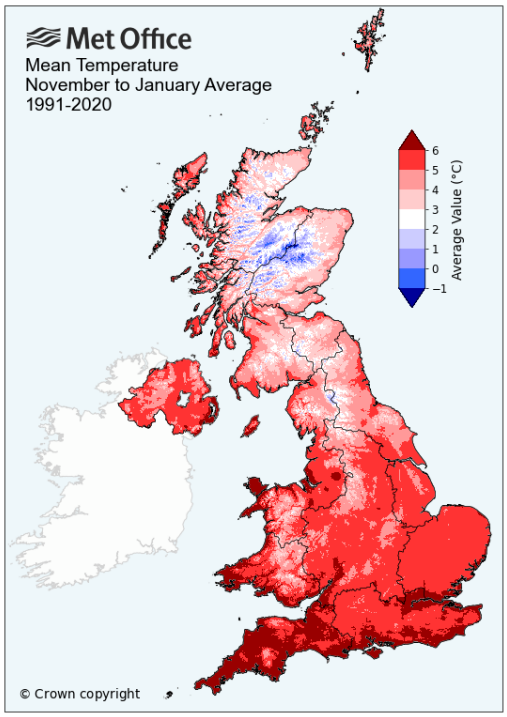
1-month wind speed Outlook compared to normal



Slightly more likely to be windy than calm

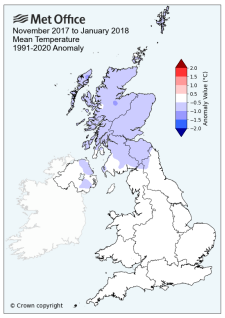
Long-term average temperatures (3-month)

This page shows the long-term average temperatures across the UK applicable to the 3 month Outlook period.

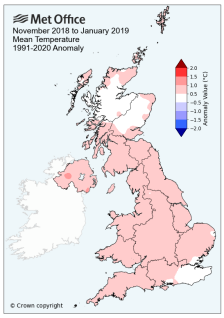


Average temperatures for November - January based on observations of past years.

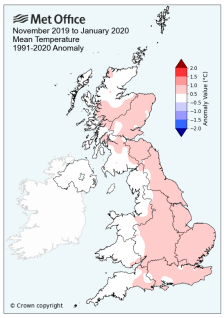
Last 5 years temperatures, difference from average (3-month)



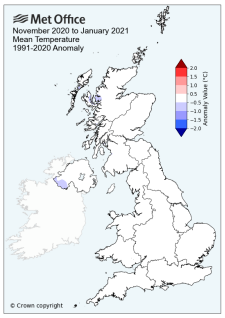
Nov - Jan 2017/18



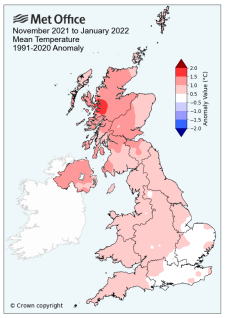
Nov - Jan 2018/19



Nov - Jan 2019/20



Nov - Jan 2020/21



Nov - Jan 2021/22

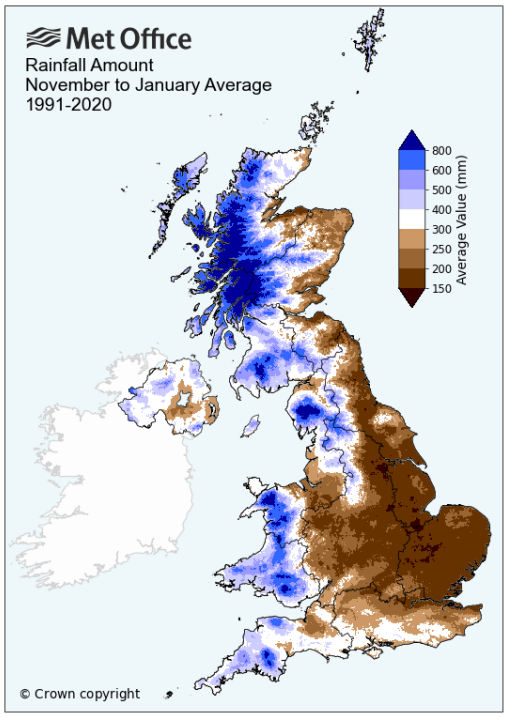
Anomaly (°C)

< -2.0	-2.0 to -1.5	-1.5 to -1.0	-1.0 to-0.5	-0.5 to 0.5	0.5 to 1.0	1.0 to 1.5	1.5 to 2.0	> -2.0

These maps show how November - Januray temperatures in the last five years differed from the long-term average temperatures shown above in the upper panel. Pink and red colours indicate warmer-than-average conditions while blue shades indicate cooler-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

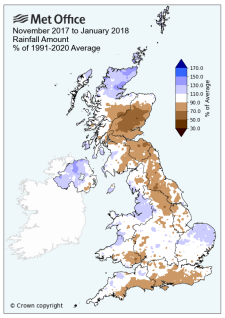
Long-term average precipitation (3-month)

This page shows the long-term average precipitation across the UK applicable to the 3 month Outlook period.

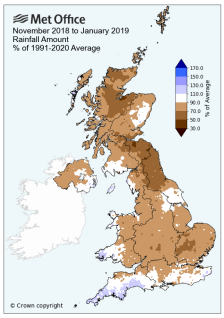


Average precipitation for November - January based on observations of past years.

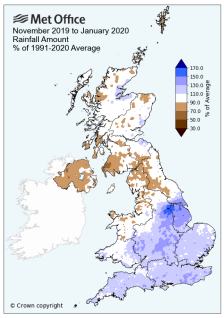
Last 5 years precipitation, difference from average (3-month)



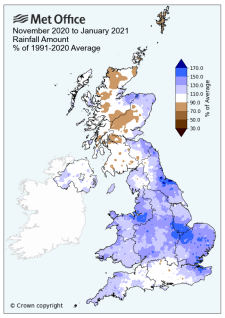
Nov - Jan 2017/18



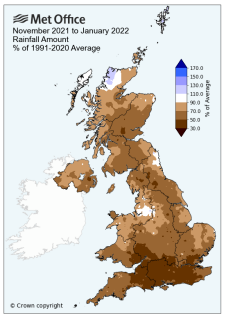
Nov - Jan 2018/19



Nov - Jan 2019/20



Nov - Jan 2020/21



Nov - Jan 2021/22

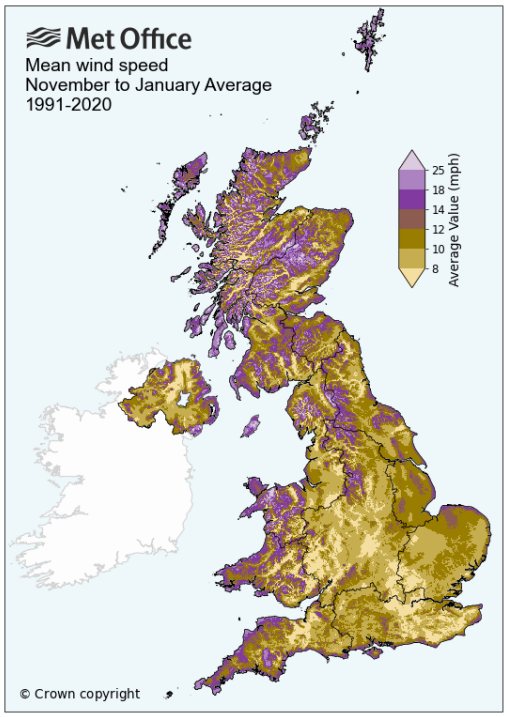
% of average

< 30	30 to 50	50 to 70	70 to 90	90 to 110	110 to 130	130 to 150	150 to 170	> 170

These maps show how November - January precipitation in the last five years differed from the long-term average precipitation shown above in the upper panel. Brown colours indicate drier-than-average conditions while green shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

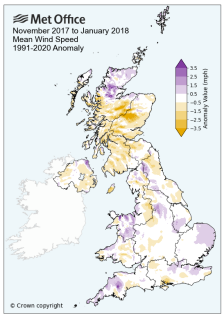
Long-term average wind speed (3-month)

This page shows the long-term average wind speed across the UK applicable to the 3 month Outlook period.

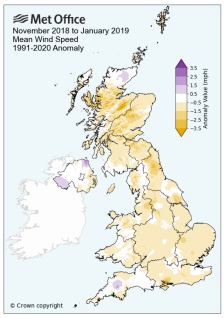


Average wind speed for November - January based on observations of past years.

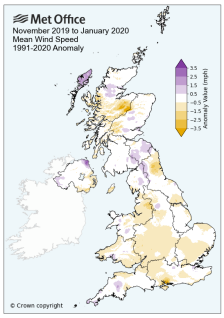
Last 5 years wind speed, difference from average (3-month)



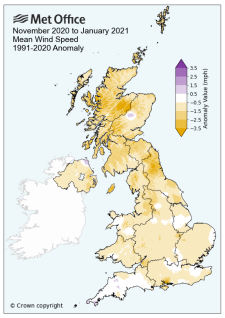
Nov - Jan 2017/18



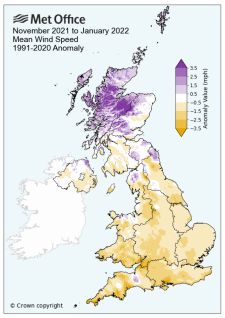
Nov - Jan 2018/19



Nov - Jan 2019/20



Nov - Jan 2020/21



Nov - Jan 2021/22

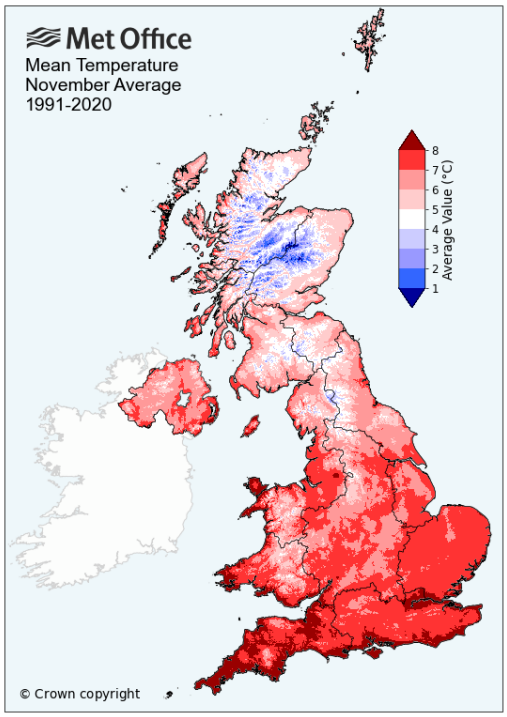
Anomaly (mph)

< -3.5	-3.5 to -2.5	-2.5 to -1.5	-1.5 to -0.5	-0.5 to 0.5	0.5 to 1.5	1.5 to 2.5	2.5 to 3.5	> 3.5

These maps show how November - January wind speed in the last five years differed from the long-term average wind speeds shown above in the upper panel. Yellow colours indicate calmer-than-average conditions while purple shades indicate windier-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

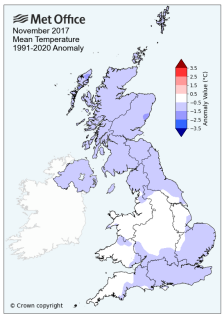
Long-term average temperatures (1-month)

This page shows the long-term average temperatures across the UK applicable to the 1 month Outlook period.

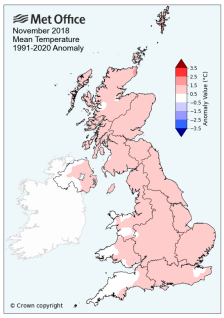


Average temperatures for November based on observations of past years.

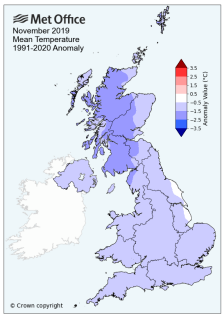
Last 5 years temperatures, difference from average (1-month)



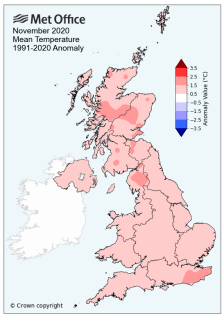
Nov 2017



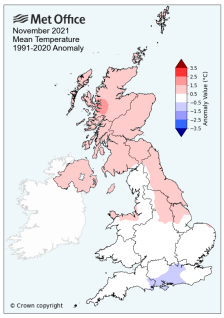
Nov 2018



Nov 2019



Nov 2020



Nov 2021

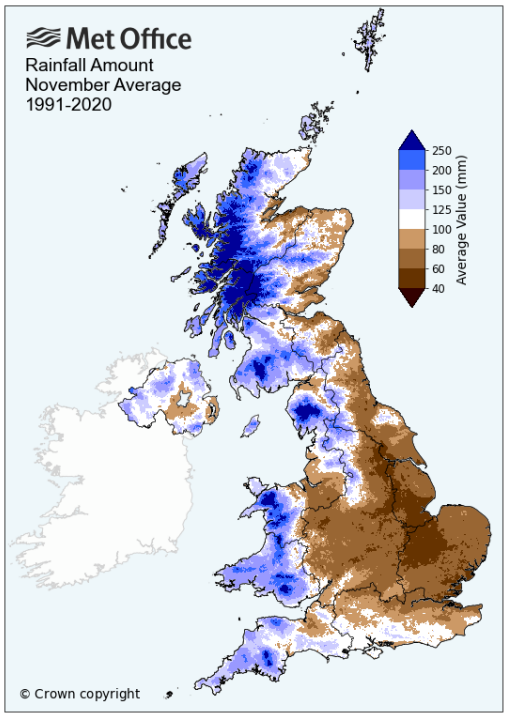
Anomaly (°C)

< -2.0	-2.0 to -1.5	-1.5 to -1.0	-1.0 to-0.5	-0.5 to 0.5	0.5 to 1.0	1.0 to 1.5	1.5 to 2.0	> -2.0

These maps show how November temperatures in the last five years differed from the long-term average temperatures shown above in the upper panel. Pink and red colours indicate warmer-than-average conditions while blue shades indicate cooler-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

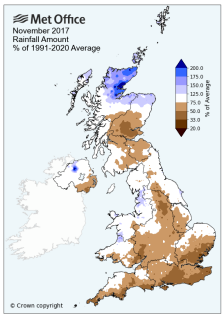
Long-term average precipitation (1-month)

This page shows the long-term average precipitation across the UK applicable to the 1 month Outlook period.

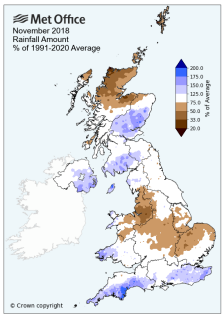


Average precipitation for November based on observations of past years.

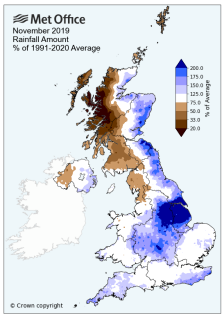
Last 5 years precipitation, difference from average (1-month)



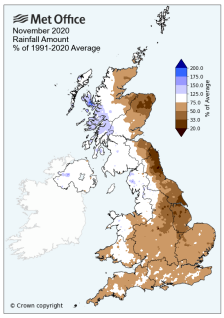
Nov 2017



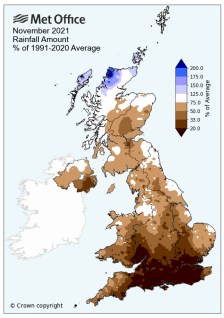
Nov 2018



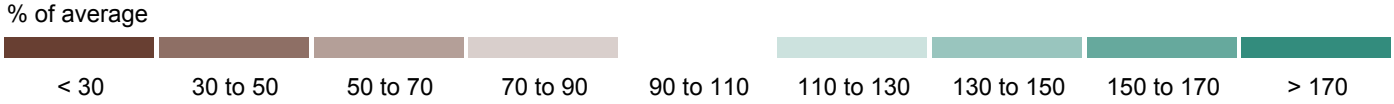
Nov 2019



Nov 2020



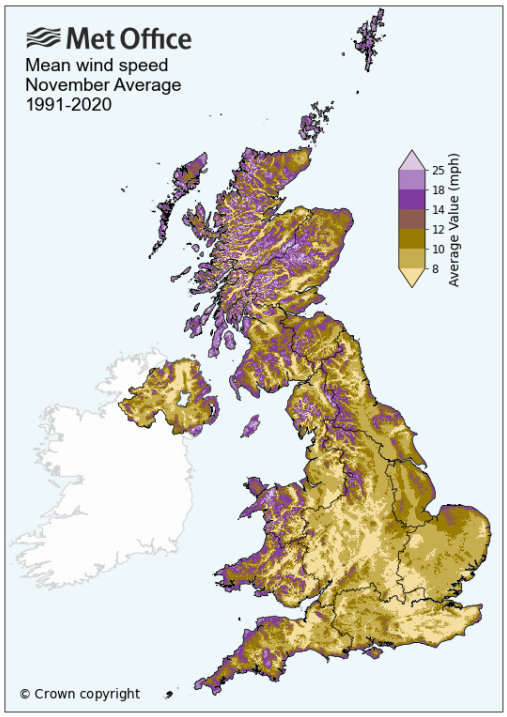
Nov 2021



These maps show how November precipitation in the last five years differed from the long-term average precipitation shown above in the upper panel. Brown colours indicate drier-than-average conditions while green shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

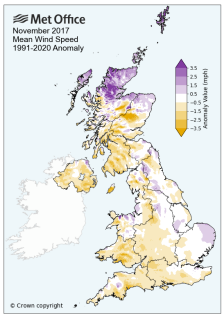
Long-term average wind speed (1-month)

This page shows the long-term average wind speed across the UK applicable to the 1 month Outlook period.

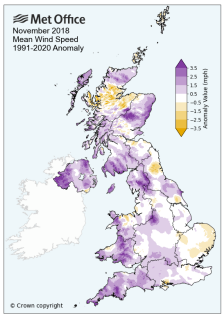


Average wind speed for November based on observations of past years.

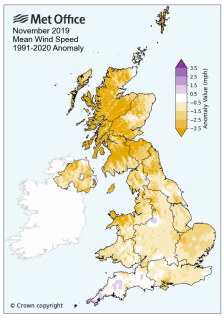
Last 5 years wind speed, difference from average (1-month)



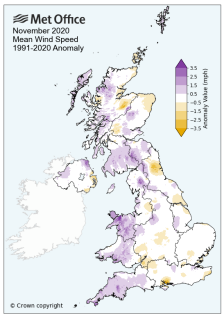
Nov 2017



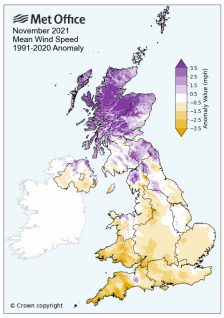
Nov 2018



Nov 2019



Nov 2020



Nov 2021

Anomaly (mph)

< -3.5	-3.5 to -2.5	-2.5 to -1.5	-1.5 to -0.5	-0.5 to 0.5	0.5 to 1.5	1.5 to 2.5	2.5 to 3.5	> 3.5

These maps show how November wind speed in the last five years differed from the long-term average wind speeds shown above in the upper panel. Yellow colours indicate calmer-than-average conditions while purple shades indicate windier-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

Q&As

Q. What is the point of the Outlook, who is it meant for?
A. This Outlook is produced for planners in government and business who make risk-based decisions. These users are aware of the complexities of this type of outlook and will include those factors in their decision-making process.

Q. How did you decide on the Outlook? What are the main factors affecting it?
A. It is based on information from observations, several numerical prediction systems and expert judgement. See the 'Outlook in Context' section of the Outlook for more details.

Q. Is the Outlook for the whole country?
A. The Outlook is for the average of conditions over the UK as a whole. Regional deviations from the UK-average can occur. For example, average UK precipitation can result from below-average rainfall for the northwest and above-average for the southeast.

Q. How confident are you in this Outlook?
A. The percentages in the 'Likelihood of Impact' sections of the Outlook give the level of confidence.

Q, With the increased chances of colder temperatures are we likely to see cold spells and winter hazards?
A. The Outlook concerns the weather themes for the whole 3-month period for the country as a whole, so it does not tell us if or when, cold spells might come along, or whether or not they will include winter hazards such as snow. However, broadly speaking, we do see snow and other winter hazards at times during colder winters, but it is still possible to have milder periods embedded within winters that are colder overall. In recent years, the likelihood of our coldest category has often been quite small reflecting the fact that UK climate has warmed compared to the long-term average.

Q. What does this Outlook mean for drought conditions in parts of the UK?
A. Although the Outlook indicates an increased risk of drier than average conditions, drought is a complex issue that goes far beyond how much it rains. It will take more than a few weeks of rain to undo the effects of prolonged periods of below average rainfall, which has particularly been the case across England and Wales over the last 6-months. The Environment Agency and Natural Resources Wales will therefore continue to work closely with water companies to assess what actions over the winter may be needed in those areas currently affected by drought.

Q. Why have you decided to include wind speeds in this product now?
A. There are important hazards associated with wind (e.g., dangers and damage from the storms) which have been highlighted within the text of the Outlook for some time. We are now strengthening the wind element further. The Outlook cannot specify the potential severity, location, duration or timing of specific wind events or windy periods. An increased likelihood of calm conditions can hide regional variations. For example, an above average chance of calm conditions could result from windier conditions in the west and calmer in the east.

Q. Does this Outlook mean there will be fewer named storms this year?
A. The Outlook suggests a reduction in the frequency of wet and windy spells compared to average during November and December. However, stormy spells remain possible, the Outlook does not predict the number of named storms, as the naming of storms is based on expected impacts.

Q. Will it be a white Christmas?
A. Whilst this Outlook looks ahead to December, it cannot identify weather for a particular day or week - so is not useful for planning for a specific day such as Christmas Day. Our 30-day forecast will provide a general view of the weather trends we are likely to see as we get nearer to December and we provide detailed forecasts and warnings out to 7 days: https://www.metoffice.gov.uk/

About the Outlook

The Outlook presented here is for United Kingdom as a whole and is based on information from observations, several numerical prediction systems and expert judgement. It is updated monthly to reflect the latest information on global weather patterns and their effect on the UK. The Outlook is designed to be used in conjunction with shorter-range forecasts – detailed weather forecast information is available on the Met Office website.

In this product, temperature refers to the average of daytime maxima and night-time minima. Wind speed refers to the average wind speed at a height of 10 metres. All numerical values relate to averages (temperature, wind speed) or totals (precipitation – rain, sleet, snow and hail) over 1 or 3 months, which are further averaged over the UK land area as a whole. Normal likelihood and long-term averages are established using the period 1991-2020.

Information for November will be superseded by the long-range information on the public weather forecast web page, starting from 1 November 2022

Find out more

- UK 3-month Outlook user guidance page:
  https://www.metoffice.gov.uk/services/government/contingency-planners/user-guidance/user-guidance
- Explainers on climate drivers (such as the El Niño Southern Oscillation and North Atlantic Oscillation) that influence seasonal forecasts and the impacts they can have on UK weather:
  https://www.metoffice.gov.uk/services/government/contingency-planners/seasonal-forecasts-and-climate-drivers-resources
- Contingency planners page:
  https://www.metoffice.gov.uk/services/government/contingency-planners/index

Contact us

Website:
www.metoffice.gov.uk

Email:
enquiries@metoffice.gov.uk

Provide your feedback

We would like to hear your feedback on the UK 3-month Outlook to understand how it is being used. Please fill in the short form using this link or QR code to share your thoughts.